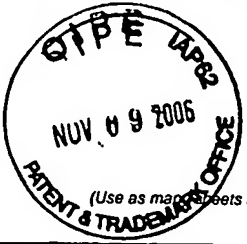
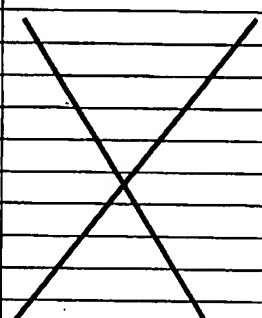
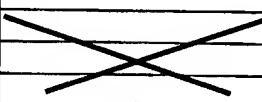


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| Substitute for form 1449A/PTO | | | |
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT  | | Complete if Known | |
| | | Application Number | 10/786,017 |
| | | Filing Date | February 26, 2004 |
| | | First Named Inventor | Babin, Denis |
| | | Art Unit | 1732 1722 |
| | | Examiner Name | Huson, Monica Anne |
| | | MARIA VERONICA EWALD | |
| Sheet | 1 | of | 2 |
| Attorney Docket No: MMID 2001 | | | |

| US PATENT DOCUMENTS | | | | | |
|---------------------|---------|---------------------|------------------|-------------------------------------------------|--------------------------------------------------------------------------------------|
| Examiner Initial * | Cite No | USP Document Number | Publication Date | Name of Patentee or Applicant of cited Document | Filing Date If Appropriate |
| /ME/ | US20 | US-2002-0086086 | 07/04/2002 | Doyle et al. |  |
| | US21 | US-2004-0256768 | 12/23/2004 | Olaru | |
| | US22 | US-2004-0265422 | 12/30/2004 | Sabin et al. | |
| | US23 | US-4123496 | 10/31/1978 | Gallizia et al. | |
| | US24 | US-4303382 | 12/01/1981 | Gellert, Jobst | |
| | US25 | US-5783234 | 07/21/1998 | Teng | |
| | US26 | US-5916605 | 06/29/1999 | Swenson et al. | |
| | US27 | US-5955121 | 09/21/1999 | Gellert et al. | |
| | US28 | US-5941637 | 08/24/1999 | Maurer | |
| /ME/ | US29 | US-6245278 | 06/12/2004 | Lausenhammer et al. | |

| FOREIGN PATENT DOCUMENTS | | | | | |
|--------------------------|---------|---------------------|------------------|-------------------------------------------------|---------------------------------------------------------------------------------------|
| Examiner Initials* | Cite No | Foreign Document No | Publication Date | Name of Patentee or Applicant of cited Document | T ² |
| /ME/ | FP7 | DE-3201710 A1 | 08/26/1982 | Gellert, Jobst U. |  |
| /ME/ | FP8 | EP-1140456 B1 | 10/10/2001 | Zahoransky et al. | |
| /ME/ | FP9 | WO-03/011443 A2 | 02/13/2003 | Stroock et al. | |

| OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS | | | |
|----------------------------------------------------|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| Examiner Initials* | Cite No ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
| /ME/ | NPL1 | "Efficient Spiral Flow 3-D Microchannel", published at < http://www.shoji.comm.waseda.ac.jp/~mf/mfeg/Sprialflow.htm >, Shoji Laboratory, Waseda University, Japan, (unknown), | |
| /ME/ | NPL2 | "Hot Runner Nozzles Increase Performance", Abstract, < www.tool-moldmaking.com >, European Tool & Mould Making, Husky Injection Molding Systems S.A., (October 2001), | |
| /ME/ | NPL3 | "Husky Introduces Ultraflow for Ultra Hot Runner Nozzles", News Release, Husky Injection Molding Systems Ltd., (June 23, 2003), | |
| /ME/ | NPL4 | "Melt Mixing Technology Improves Part Quality", News Release, Husky Injection Molding Systems Ltd., (August 9, 2001), | |
| /ME/ | NPL5 | "New UltraFlow Tip Improves Melt Homogeneity and Part Quality", News Release, Husky Injection Molding Systems Ltd., (October 20, 2004), | |

EXAMINER

/Maria Ewald/

DATE CONSIDERED

05/25/2007

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|----------------------------------------------------------------------------------------------------------------------------------------|--------------------|----|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------|------------|-------------|-------------------|----------------------|--------------|----------|-----------|---------------|--------------------|----------------------|--|
| Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary) | | | | <div style="text-align: right; font-size: small;">Complete if Known</div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Application Number</td> <td>10/786,017</td> </tr> <tr> <td>Filing Date</td> <td>February 26, 2004</td> </tr> <tr> <td>First Named Inventor</td> <td>Babin, Denis</td> </tr> <tr> <td>Art Unit</td> <td>4732 1722</td> </tr> <tr> <td>Examiner Name</td> <td>Huson, Monica Anne</td> </tr> <tr> <td colspan="2" style="text-align: center;">MARIA VERONICA EWALD</td> </tr> </table> | | Application Number | 10/786,017 | Filing Date | February 26, 2004 | First Named Inventor | Babin, Denis | Art Unit | 4732 1722 | Examiner Name | Huson, Monica Anne | MARIA VERONICA EWALD | |
| Application Number | 10/786,017 | | | | | | | | | | | | | | | | |
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| First Named Inventor | Babin, Denis | | | | | | | | | | | | | | | | |
| Art Unit | 4732 1722 | | | | | | | | | | | | | | | | |
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| MARIA VERONICA EWALD | | | | | | | | | | | | | | | | | |
| Sheet | 2 | of | 2 | Attorney Docket No: MMID 2001 | | | | | | | | | | | | | |

| OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS | | | | |
|----------------------------------------------------|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------|
| Examiner Initials* | Cite No ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | | T ² |
| /ME/ | NPL6 | "Nozzle Tip Handles Quick Colour Changes", Abstract, < www.tool-moldmaking.com >, European Tool & Mould Making Husky Injection Molding Systems S.A., (May/June 2001), | | |
| /ME/ | NPL7 | "Stable Melt Profile Means Uniform Part Quality", Abstract, < www.tool-moldmaking.com >, European Tool & Mould Making, Husky Injection Molding Systems S.A., (July/August 2002), | | |
| /ME/ | NPL8 | "When Mixing It Is a Good Idea", Abstract, < www.tool-mold-making.com >, European Tool & Mould Making, Husky Injection Molding Systems S.A., November/December 2001 | | |
| /ME/ | NPL9 | BLUNDY, J , "Improving Shear Induced Imbalance in Hot Runner Systems", INCOE Corporation, (June 25, 2004), | | |
| /ME/ | NPL10 | STROOK, ABRAHAM D., "Microsystems, Microfluidic Transport, an Colloid Science", Cornell University Website at http://web1temp.cheme.cornell.edu/peoplevents/faculty/stroock/research.htm , (unknown) | | |
| /ME/ | NPL11 | WRIGHT, CORIN, "Improving Color Change in Hot Runner Molds", <u>Plastics Machinery & Auxiliaries</u> , (April, 2003) | | |

EXAMINER

/Maria Ewald/

DATE CONSIDERED

05/25/2007

| | | | | | | | | | | | | | | | |
|----------------------------------------------------------------------------------------------------------------------------------------|-----------------------|----|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------|------------|-------------|-------------------|----------------------|--------------|----------|------|---------------|-----------------------|
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| Art Unit | 1722 | | | | | | | | | | | | | | |
| Examiner Name | Ewald, Maria Veronica | | | | | | | | | | | | | | |
| Sheet | 1 | of | 1 | Attorney Docket No: MMID 2001 | | | | | | | | | | | |

| US PATENT DOCUMENTS | | | | | |
|---------------------|---------|-------------------|------------------|-------------------------------------------------|--------------------------------------|
| Examiner Initial * | Cite No | Document Number | Publication Date | Name of Patentee or Applicant of Cited Document | Filing Date If Appropriate |
| /ME/ | US36 | US-2005-0238758A1 | 10/27/2005 | Ciccone et al. | <div style="font-size: 2em;">X</div> |
| /ME/ | US37 | US-4292018 | 09/29/1981 | Beale | |
| /ME/ | US38 | US-4443178 | 04/17/1984 | Fujita | |
| /ME/ | US39 | US-6450798B1 | 09/17/2002 | Choi et al. | |

| FOREIGN PATENT DOCUMENTS | | | | | |
|--------------------------|---------|-------------------------|------------------|-------------------------------------------------|--------------------------------------|
| Examiner Initials* | Cite No | Foreign Patent Document | Publication Date | Name of Patentee or Applicant of cited Document | T ² |
| /ME/ | FP13 | JP-10-006363 A | 01/13/1998 | Atsushi | <div style="font-size: 2em;">X</div> |
| /ME/ | FP14 | JP-2-178012 | 07/11/1990 | Kazutoshi | |

| OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS | | | |
|----------------------------------------------------|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| Examiner Initials* | Cite No ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
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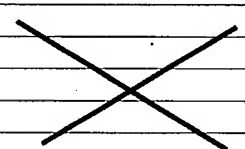
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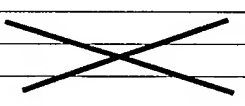
/Maria Ewald/

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|----------------------------------------------------------------------------------------------------------------------------------------|---|----|---|-------------------------------|-----------------------|
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| | | | | | |
| Sheet | 1 | of | 1 | Attorney Docket No: MMID 2001 | |

| US PATENT DOCUMENTS | | | | | |
|---------------------|---------|---------------------|------------------|-------------------------------------------------|-------------------------------------------------------------------------------------|
| Examiner Initial* | Cite No | USP Document Number | Publication Date | Name of Patentee or Applicant of cited Document | Filing Date If Appropriate |
| /ME/ | US30 | US-4403933 | 09/13/1983 | Davis et al. |  |
| | US31 | US-4469649 | 09/04/1984 | Ibar | |
| ↓ | US32 | US-5069840 | 12/03/1991 | Arnott | |
| | US33 | US-5262119 | 11/16/1993 | Smith | |
| /ME/ | US34 | US-5554395 | 09/10/1996 | Hume et al. | |

| FOREIGN PATENT DOCUMENTS | | | | | |
|--------------------------|---------|---------------------|------------------|-------------------------------------------------|---------------------------------------------------------------------------------------|
| Examiner Initials* | Cite No | Foreign Document No | Publication Date | Name of Patentee or Applicant of cited Document | T ² |
| /ME/ | FP10 | EP-0 779 140 A1 | 06/18/1997 | Husky |  |
| /ME/ | FP11 | WO-03/035 358 A1 | 05/01/2003 | Husky | |
| /ME/ | FP12 | DE-20 17 710 A1 | 10/22/1970 | Montecatini Edison S.p.A. | |

| OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS | | | |
|----------------------------------------------------|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| Examiner Initials* | Cite No ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
| /ME/ | NPL12 | BEAUMONT, JOHN P., et al., "Solving Mold Filling Imbalances in Multi-cavity Injection Molds", <u>Journal of Injection Molding Technology</u> , (June 1998, Vol. 2, no. 2), 47-58 | |

EXAMINER

/Maria Ewald/

DATE CONSIDERED

05/25/2007

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|--------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|----|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------|------------|-------------|-------------------|----------------------|--------------|----------|------|---------------|-----------------------|
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| US PATENT DOCUMENTS | | | | | |
|---------------------|---------|---------------------|------------------|-------------------------------------------------|----------------------------|
| Examiner Initial * | Cite No | USP Document Number | Publication Date | Name of Patentee or Applicant of cited Document | Filing Date If Appropriate |
| /ME/ | US35 | US-3696840 | 10/10/1972 | Odhner | XXXXXX |

| FOREIGN PATENT DOCUMENTS | | | | | |
|--------------------------|---------|---------------------|------------------|-------------------------------------------------|----------------|
| Examiner Initials* | Cite No | Foreign Document No | Publication Date | Name of Patentee or Applicant of cited Document | T ² |
| | | | | | |

| OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS | | | |
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| Examiner Initials* | Cite No ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
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|----------|---------------|-----------------|------------|